

ROCK SPRINGS WY

Latitude = 41.60 N

WMO No. 725744

Longitude = 109.00 W

Elevation = 6759 feet

Period of Record = 1973 to 1996

Average Pressure = 23.40 inches Hg

Design Criteria Data

	Design Value	Mean Coincident (Average) Values			
		Wet Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Dry Bulb Temperature (T)	(°F)				
Median of Extreme Highs	91	56	31	12.9	W
0.4% Occurrence	86	54	30	13.3	W
1.0% Occurrence	84	54	31	13.4	W
2.0% Occurrence	82	53	32	13.1	W
Mean Daily Range	22	-	-	-	-
97.5% Occurrence	5	4	7	7.8	WSW
99.0% Occurrence	-2	-3	4	6.7	WSW
99.6% Occurrence	-9	-10	3	5.6	ENE
Median of Extreme Lows	-16	-16	2	8.2	ENE
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Humidity Ratio (gr/lb)	Wind Speed (mph)	Prevailing Direction (NSEW)
Wet Bulb Temperature (T_{wb})	(°F)				
Median of Extreme Highs	61	76	73	9.9	E
0.4% Occurrence	59	75	67	10.7	W
1.0% Occurrence	57	74	59	10.5	W
2.0% Occurrence	56	74	54	10.5	W
	Design Value	Mean Coincident (Average) Values			
		Dry Bulb Temperature (°F)	Vapor Pressure (in. Hg)	Wind Speed (mph)	Prevailing Direction (NSEW)
Humidity Ratio (HR)	(gr/lb)				
Median of Extreme Highs	92	64	0.49	8.7	E
0.4% Occurrence	79	61	0.42	7.9	WSW
1.0% Occurrence	71	62	0.38	8.0	S
2.0% Occurrence	65	61	0.35	8.9	S
Air Conditioning/ Humid Area Criteria	# of Hours	T ≥ 93°F	T ≥ 80°F	T _{wb} ≥ 73°F	T _{wb} ≥ 67°F
		0	307	0	0

Other Site Data

Weather Region	Rain Rate 100 Year Recurrence (in./hr)	Basic Wind Speed 3 sec gust @ 33 ft 50 Year Recurrence (mph)	Ventilation Cooling Load Index (Ton-hr/cfm/yr) Base 75°F-RH 60% Latent + Sensible
5	1.3	90	0.0 + 0.3
Ground Water Temperature (°F) 50 Foot Depth *	Frost Depth 50 Year Recurrence (in.)	Ground Snow Load 50 Year Recurrence (lb/ft ²)	Average Annual Freeze-Thaw Cycles (#)
45.2	N/A	N/A	104

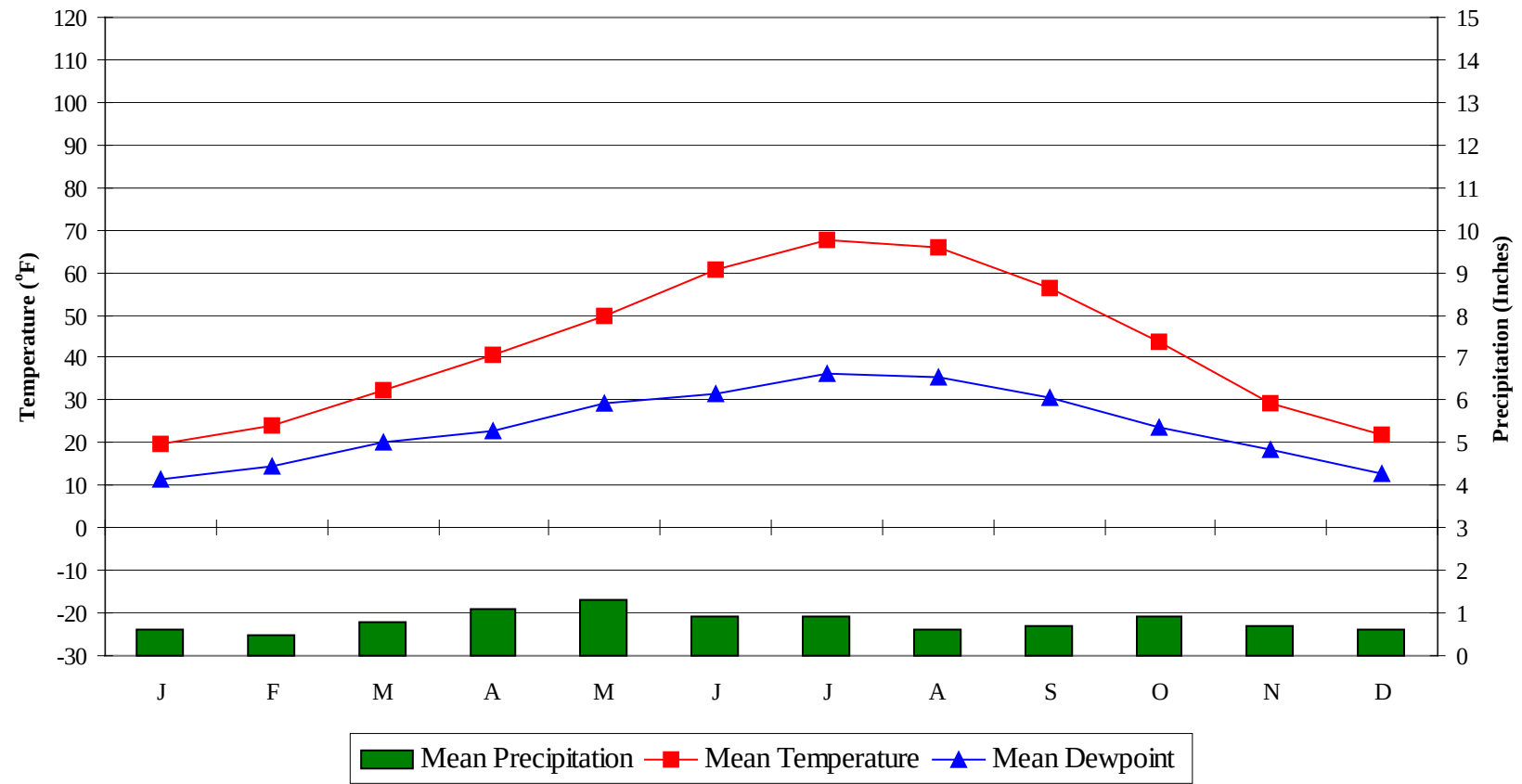
*Note: Temperatures at greater depths can be estimated by adding 1.5°F per 100 feet additional depth.

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Average Annual Climate

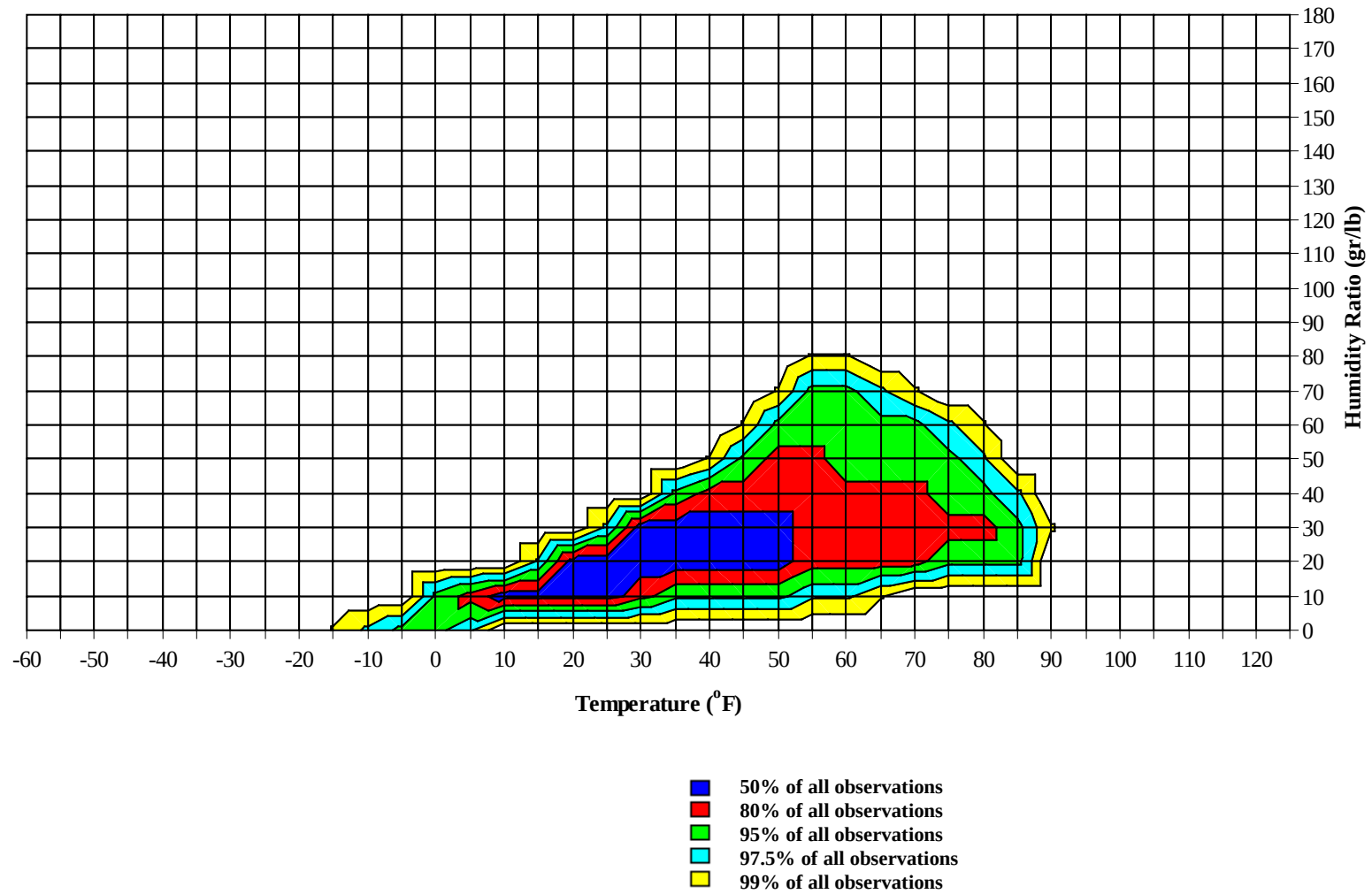


ROCK SPRINGS

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WMO No. 725744

Long Term Psychrometric Summary

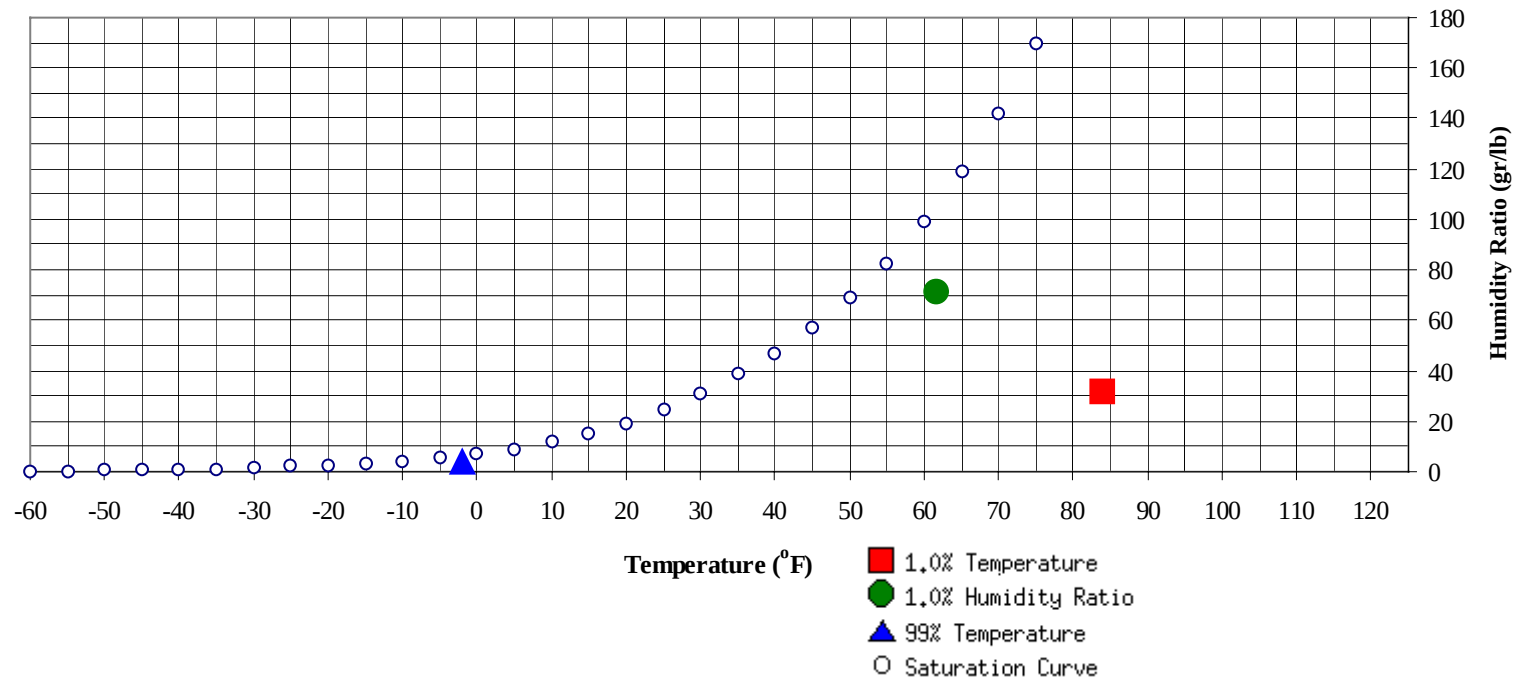


ROCK SPRINGS

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Psychrometric Summary of Peak Design Values



	(°F)	MCHR (gr/lb)	Enthalpy (btu/lb)	1.0% Humidity Ratio	(gr/lb)	MCDB (°F)	MCWB (°F)	MC Dewpt (°F)	Enthalpy (btu/lb)
99% Dry Bulb	-2	4.2	0.2		71.4	61.6	54.9	51.1	25.9

	(°F)	MCHR (gr/lb)	MCWB (°F)	Enthalpy (btu/lb)
1.0% Dry Bulb	84	31.5	54	25.1

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Dry-Bulb Temperature Hours For An Average Year (Sheet 1 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	January					February					March				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
90 / 94															
85 / 89															
80 / 84															
75 / 79															
70 / 74															
65 / 69												0	0	0	44.3
60 / 64												1	0	1	42.3
55 / 59							1		1	38.6		8	2	10	40.2
50 / 54							4	0	4	37.5		18	5	23	38.1
45 / 49		3	0	3	35.2		11	2	13	35.9	1	30	13	44	36.2
40 / 44	0	13	2	15	33.1	1	23	10	34	33.4	6	44	29	79	33.7
35 / 39	4	27	14	45	31.1	10	39	29	78	30.9	25	50	46	121	31.1
30 / 34	20	42	36	98	27.8	34	40	44	118	28.0	63	50	68	181	28.2
25 / 29	38	42	44	125	24.0	39	34	41	115	23.9	66	28	46	140	24.2
20 / 24	45	34	44	123	19.8	35	28	36	100	19.6	45	13	25	83	19.9
15 / 19	40	31	36	107	15.4	33	17	25	75	15.3	25	4	9	38	15.6
10 / 14	35	21	30	86	10.7	26	11	16	53	10.6	10	2	4	16	10.9
5 / 9	20	14	16	50	6.0	17	8	8	33	5.9	4	1	0	5	5.8
0 / 4	17	12	12	41	1.0	14	5	7	26	0.9	1	0	1	2	1.0
-5 / -1	10	6	7	23	-3.4	5	2	3	10	-3.7	1		0	1	-3.0
-10 / -6	9	3	4	16	-7.6	4	1	2	7	-7.9					
-15 / -11	4	1	3	8	-12.2	3	1	0	4	-12.1					
-20 / -16	3	0	1	4	-17.1	1		0	1	-17.0					
-25 / -21	1	0		1	-21.1	0			0	-22.1					
-30 / -26	0	0		0	-25.5										

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

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Dry-Bulb Temperature Hours For An Average Year (Sheet 2 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	April					May					June				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
90 / 94												1	0	1	54.9
85 / 89												11	3	14	53.9
80 / 84							1	0	1	51.1		28	10	39	52.3
75 / 79		0		0	48.6		7	2	9	50.2	0	40	19	59	51.0
70 / 74		5	1	6	47.0	0	25	8	33	48.2	3	43	27	73	49.8
65 / 69		13	5	18	45.0	0	37	16	53	46.6	10	36	41	87	48.3
60 / 64	0	19	8	27	42.7	3	40	24	67	44.9	26	30	42	98	46.5
55 / 59	1	29	15	45	40.9	9	40	36	85	43.2	46	20	36	102	44.8
50 / 54	5	37	26	68	38.9	31	36	46	114	41.6	57	18	29	103	42.8
45 / 49	16	35	31	83	36.7	51	26	43	120	39.6	46	8	18	72	40.7
40 / 44	36	35	40	111	34.3	59	19	34	111	36.9	33	4	11	48	37.6
35 / 39	44	29	43	116	31.6	48	12	24	83	33.3	15	1	3	19	34.0
30 / 34	59	24	38	121	28.5	35	4	12	51	29.8	4	0	1	5	31.0
25 / 29	45	11	23	79	24.5	11	1	2	14	25.8	0			0	28.7
20 / 24	24	3	8	35	20.5	1			1	20.9					
15 / 19	8	0	2	10	16.3										
10 / 14	1		0	1	11.7										
5 / 9	0			0	7.7										
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															
-30 / -26															

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WMO No. 725744

Dry-Bulb Temperature Hours For An Average Year (Sheet 3 of 5)

Period of Record = 1973 to 1996

Temperature Range (°F)	July					August					September				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
90 / 94		3	1	4	56.2		2	0	2	57.3					
85 / 89		28	8	36	54.6		19	5	24	54.6		2	0	2	54.7
80 / 84		64	28	92	53.9		53	20	73	53.6		14	4	18	53.1
75 / 79	1	56	34	92	53.2	0	61	29	90	52.8		27	8	35	50.8
70 / 74	6	46	44	96	52.2	2	52	42	95	51.7	0	45	18	63	49.4
65 / 69	26	27	50	104	50.8	14	34	53	101	50.4	1	41	31	73	48.0
60 / 64	59	13	44	116	49.3	52	18	51	120	48.9	12	36	39	87	46.4
55 / 59	79	7	24	110	47.9	81	7	31	120	47.1	29	28	47	104	44.6
50 / 54	55	3	11	69	45.3	66	3	13	82	44.8	59	22	41	121	42.5
45 / 49	18	1	2	21	42.0	24	1	3	28	41.2	59	12	23	93	39.7
40 / 44	4	0		4	38.4	6	0	1	7	37.4	39	8	15	62	36.4
35 / 39	0			0	38.0	2		0	2	34.2	22	4	8	34	33.0
30 / 34											13	2	5	20	29.8
25 / 29											4		2	6	25.5
20 / 24											1		0	1	22.0
15 / 19											0		0	0	17.4
10 / 14															
5 / 9															
0 / 4															
-5 / -1															
-10 / -6															
-15 / -11															
-20 / -16															
-25 / -21															
-30 / -26															

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Dry-Bulb Temperature Hours For An Average Year (Sheet 4 of 5)
Period of Record = 1973 to 1996

Temperature Range (°F)	October					November					December				
	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00			01 To 08	09 To 16	17 To 00		
90 / 94															
85 / 89															
80 / 84															
75 / 79		2	0	2	48.1										
70 / 74	0	14	2	16	46.7										
65 / 69	0	22	5	27	45.2										
60 / 64	0	29	12	41	43.3		2		2	42.7					
55 / 59	2	34	21	57	41.2		8	0	8	40.5		0		0	40.7
50 / 54	11	38	37	86	39.3		17	3	20	38.9		2		2	38.6
45 / 49	31	33	43	107	37.2	1	22	10	33	36.5		7	0	7	36.1
40 / 44	46	28	43	117	34.9	9	34	25	68	34.1	2	17	6	25	33.6
35 / 39	58	24	32	114	32.2	26	39	41	106	31.3	9	30	19	58	30.9
30 / 34	48	17	29	94	28.9	48	38	45	131	28.2	25	39	39	104	27.8
25 / 29	28	6	13	47	24.4	44	33	43	120	24.0	39	48	47	135	23.6
20 / 24	13	2	6	21	20.5	43	22	31	96	19.8	44	37	42	124	19.5
15 / 19	6	1	2	9	16.1	31	13	21	65	15.9	41	27	35	103	15.2
10 / 14	2	1	1	4	10.3	19	6	13	38	11.1	35	20	31	86	10.8
5 / 9	1	0	1	2	6.4	7	4	4	15	6.5	23	10	14	47	6.0
0 / 4	0			0	2.3	5	2	4	11	1.4	16	5	6	27	1.3
-5 / -1						2	1	1	4	-3.2	5	3	3	11	-3.4
-10 / -6						2	0	1	3	-7.0	3	2	2	7	-7.4
-15 / -11						1			1	-11.4	1	1	2	4	-12.3
-20 / -16											2	1	1	4	-16.6
-25 / -21											0	0	1	1	-22.0
-30 / -26											1	0	0	1	-26.5

Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

ROCK SPRINGS WY WMO No. 725744
Dry-Bulb Temperature Hours For An Average Year (Sheet 5 of 5)
Period of Record = 1973 to 1996

Annual Totals					
Temperature Range (°F)	Hour Group (LST)			Total Obs	M C W B (°F)
	01 To 08	09 To 16	17 To 00		
90 / 94		6	1	7	56.3
85 / 89		60	16	76	54.5
80 / 84		160	62	222	53.4
75 / 79	1	194	91	286	52.2
70 / 74	11	229	141	381	50.5
65 / 69	52	211	200	463	48.7
60 / 64	151	188	220	559	46.9
55 / 59	245	183	212	640	44.7
50 / 54	282	198	212	692	41.9
45 / 49	248	189	192	629	38.6
40 / 44	242	225	218	685	35.1
35 / 39	266	252	261	778	31.7
30 / 34	354	256	319	930	28.3
25 / 29	316	201	260	778	24.1
20 / 24	251	139	192	581	19.8
15 / 19	185	91	128	404	15.5
10 / 14	128	60	94	282	10.8
5 / 9	74	35	42	152	6.0
0 / 4	53	23	28	103	1.1
-5 / -1	23	11	14	48	-3.4
-10 / -6	19	6	8	33	-7.6
-15 / -11	9	2	5	16	-12.2
-20 / -16	6	1	3	10	-16.9
-25 / -21	2	1	1	4	-21.6
-30 / -26	1	0	0	1	-26.4

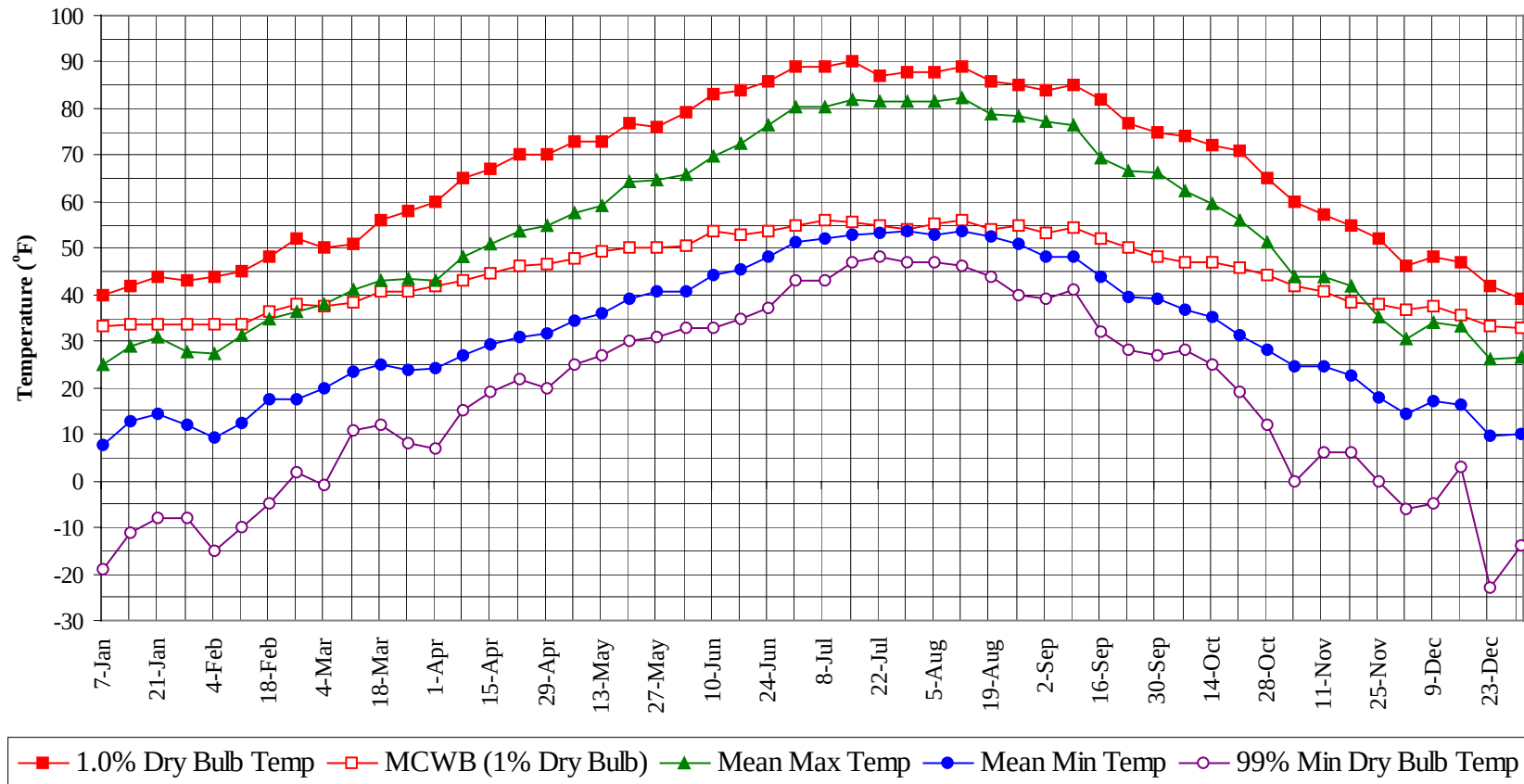
Caution: This summary reflects the typical distribution of temperature in a typical year. It does not reflect the typical moisture distribution. Because wet bulb temperatures are averaged, this summary understates the annual moisture load. For accurate moisture load data, see the long-term humidity summary and the ventilation and infiltration load pages in this manual.

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Annual Summary of Temperatures

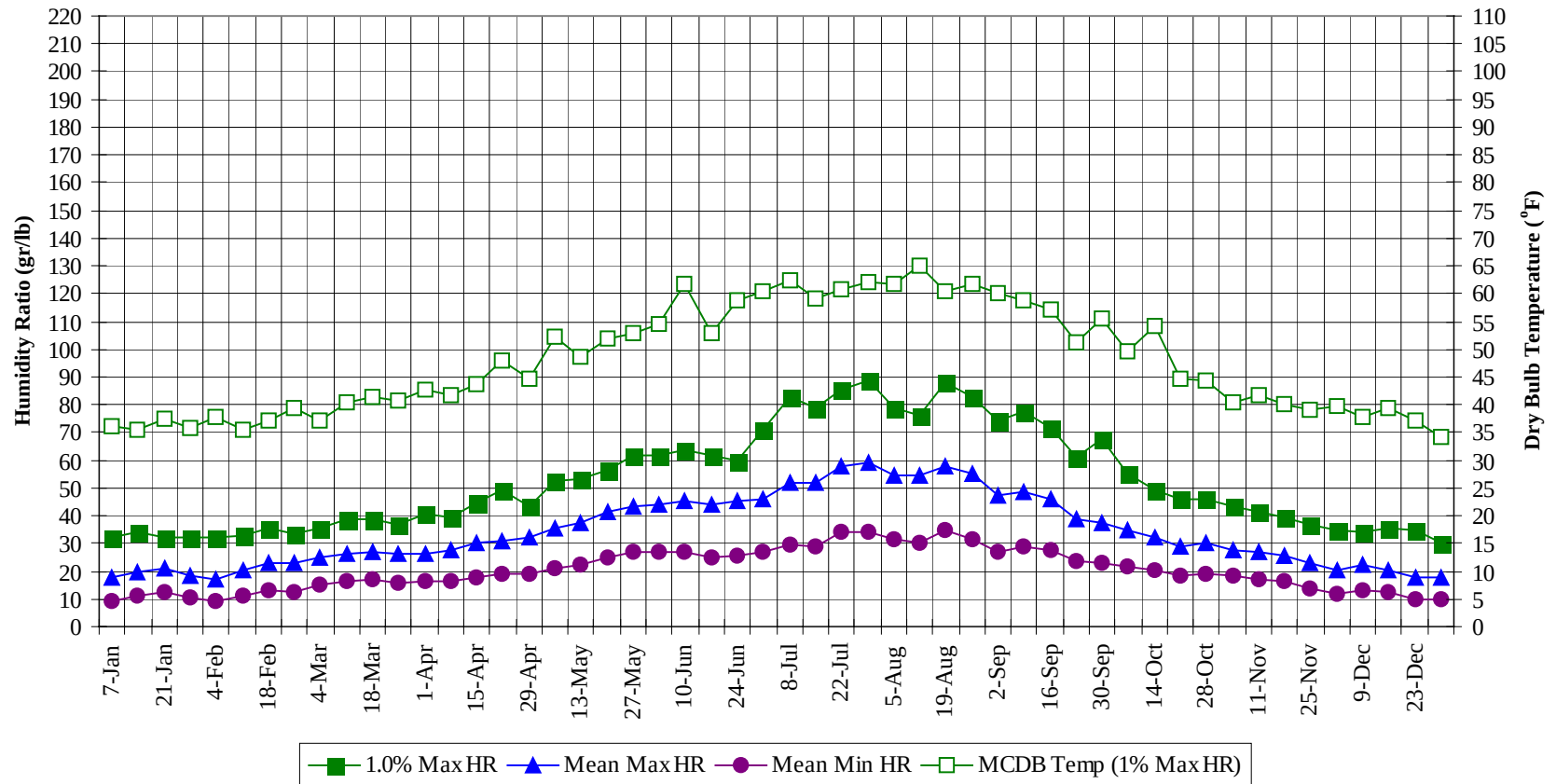


ROCK SPRINGS

WY

WMO No. 725744

Long Term Humidity and Dry Bulb Temperature Summary



ROCK SPRINGS**WY****WMO No. 725744****Long Term Dry Bulb Temperature and Humidity Summary**

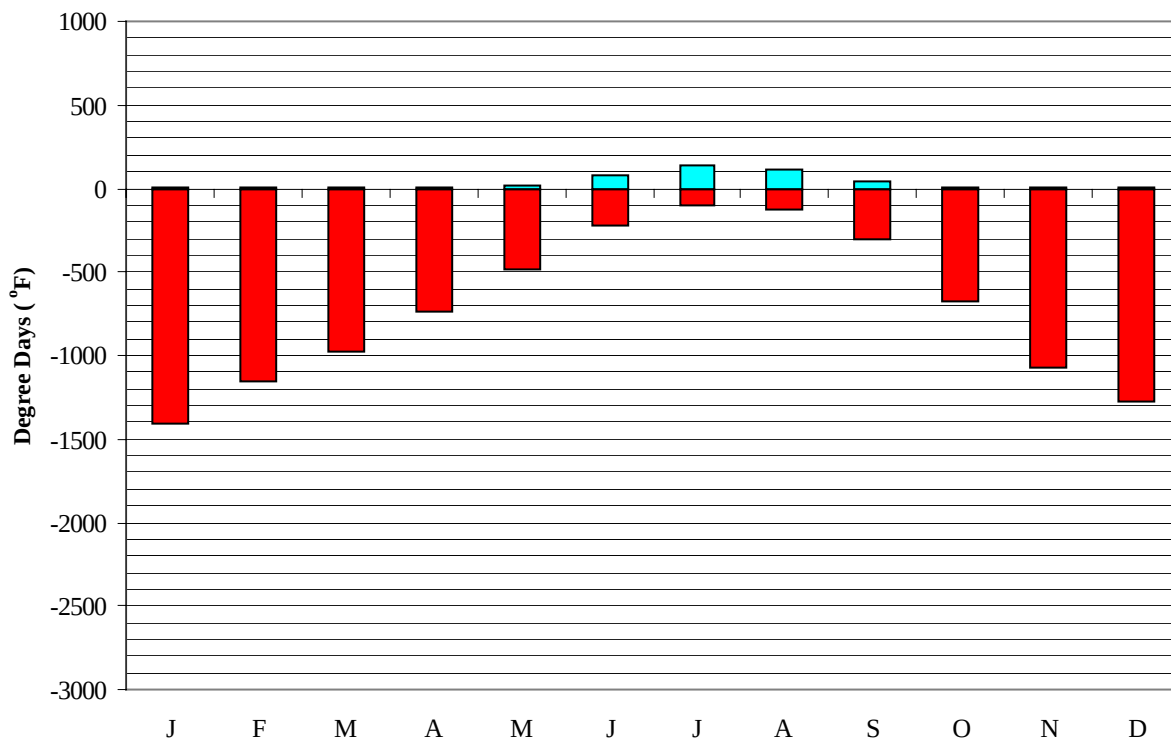
Week Ending	1.0% Temp (°F)	MCWB @ 1% Temp (°F)	Mean Max Temp (°F)	Mean Min Temp (°F)	99% Temp (°F)	1.0% HR (gr/lb)	MCDB @ 1% HR (°F)	Mean Max HR (gr/lb)	Mean Min HR (gr/lb)
7-Jan	40.0	33.3	25.1	7.7	-19.0	32.2	36.2	17.6	9.5
14-Jan	42.0	33.8	29.0	12.8	-11.0	34.3	35.6	19.6	11.3
21-Jan	44.0	33.4	30.7	14.6	-8.0	32.2	37.5	21.2	12.6
28-Jan	43.0	33.8	27.6	12.0	-8.0	32.2	35.8	18.5	10.6
4-Feb	44.0	33.5	27.5	9.2	-15.0	32.2	37.6	17.2	9.5
11-Feb	45.0	33.7	31.1	12.3	-10.0	32.9	35.5	20.6	11.1
18-Feb	48.0	36.4	34.6	17.4	-5.0	35.7	37.2	22.9	13.5
25-Feb	52.0	38.1	36.4	17.7	2.0	33.6	39.5	22.9	12.7
4-Mar	50.0	37.7	38.1	20.0	-1.0	35.7	37.2	24.7	15.2
11-Mar	51.0	38.3	41.1	23.4	11.0	38.5	40.5	26.3	16.6
18-Mar	56.0	40.7	43.1	25.0	12.0	38.5	41.5	27.0	16.9
25-Mar	58.0	40.9	43.3	23.8	8.0	37.1	40.8	26.6	16.0
1-Apr	60.0	41.8	43.2	24.0	7.0	40.6	42.8	26.6	16.2
8-Apr	65.0	43.2	48.3	26.9	15.0	39.2	41.6	27.7	16.6
15-Apr	67.0	44.5	51.0	29.2	19.0	44.8	43.7	30.0	17.8
22-Apr	70.0	46.4	53.9	31.0	22.0	49.0	48.0	31.0	19.0
29-Apr	70.0	46.5	54.7	31.7	20.0	43.4	44.7	32.5	19.3
6-May	73.0	47.9	57.5	34.3	25.0	52.5	52.2	35.6	21.1
13-May	73.0	49.4	59.2	35.8	27.0	53.2	48.7	37.4	22.1
20-May	77.0	49.9	64.3	39.3	30.0	56.7	52.0	41.2	25.0
27-May	76.0	50.1	64.8	40.6	31.0	61.6	52.7	43.3	26.9
3-Jun	79.0	50.3	65.9	40.6	33.0	61.6	54.7	43.9	26.8
10-Jun	83.0	53.5	69.8	44.3	33.0	63.7	61.8	45.0	27.2
17-Jun	84.0	53.0	72.5	45.3	35.0	61.6	52.8	44.2	25.0
24-Jun	86.0	53.6	76.4	48.1	37.0	59.5	58.7	45.3	25.8
1-Jul	89.0	55.0	80.2	51.3	43.0	70.7	60.3	46.3	26.8
8-Jul	89.0	56.0	80.2	51.9	43.0	82.6	62.4	52.2	29.5
15-Jul	90.0	55.7	82.1	53.0	47.0	79.1	59.1	52.2	29.2
22-Jul	87.0	54.8	81.4	53.3	48.0	85.4	60.6	57.8	34.3
29-Jul	88.0	54.1	81.5	53.7	47.0	88.9	62.2	58.9	34.0
5-Aug	88.0	55.2	81.6	53.0	47.0	79.1	61.7	54.4	31.3
12-Aug	89.0	56.2	82.2	53.6	46.0	76.3	64.9	54.7	30.4
19-Aug	86.0	54.1	78.9	52.4	44.0	88.2	60.4	57.8	34.6
26-Aug	85.0	54.8	78.6	50.8	40.0	82.6	61.7	55.1	31.5
2-Sep	84.0	53.1	77.4	48.4	39.0	74.2	60.1	47.3	26.8
9-Sep	85.0	54.5	76.4	48.2	41.0	77.7	58.6	48.7	28.6
16-Sep	82.0	52.0	69.5	44.0	32.0	71.4	57.1	46.2	27.7
23-Sep	77.0	50.0	66.5	39.4	28.0	60.9	51.2	38.8	23.4
30-Sep	75.0	48.1	66.2	39.2	27.0	67.9	55.6	37.2	22.9
7-Oct	74.0	46.9	62.3	36.8	28.0	55.3	49.5	34.6	21.7
14-Oct	72.0	47.0	59.7	35.2	25.0	49.0	54.2	32.0	20.3
21-Oct	71.0	45.9	55.9	31.4	19.0	46.2	44.7	29.0	18.7
28-Oct	65.0	44.2	51.2	28.2	12.0	46.2	44.4	30.1	18.9
4-Nov	60.0	41.8	43.9	24.6	0.0	43.4	40.3	27.6	18.1
11-Nov	57.0	40.7	43.7	24.6	6.0	41.3	41.7	27.1	17.2
18-Nov	55.0	38.4	42.0	22.6	6.0	39.2	40.0	25.9	16.4
25-Nov	52.0	38.0	35.2	18.1	0.0	37.1	39.2	22.7	13.7
2-Dec	46.0	36.8	30.3	14.4	-6.0	35.0	39.6	20.6	11.9
9-Dec	48.0	37.4	33.9	17.3	-5.0	34.3	37.9	22.2	13.2
16-Dec	47.0	35.4	33.2	16.3	3.0	35.7	39.5	20.7	12.4
23-Dec	42.0	33.4	26.2	9.8	-23.0	35.0	37.2	17.5	9.7
31-Dec	39.0	32.9	26.4	10.2	-14.0	30.1	34.0	18.0	9.8

ROCK SPRINGS

WY

WMO No. 725744

Degree Days, Heating and Cooling
(Base 65°F)



■ Mean Cooling Degree Days ■ Mean Heating Degree Days

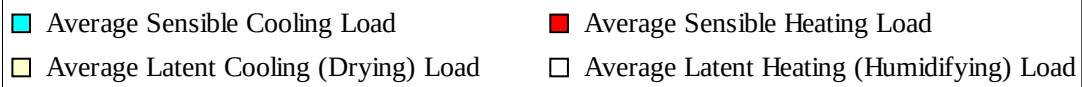
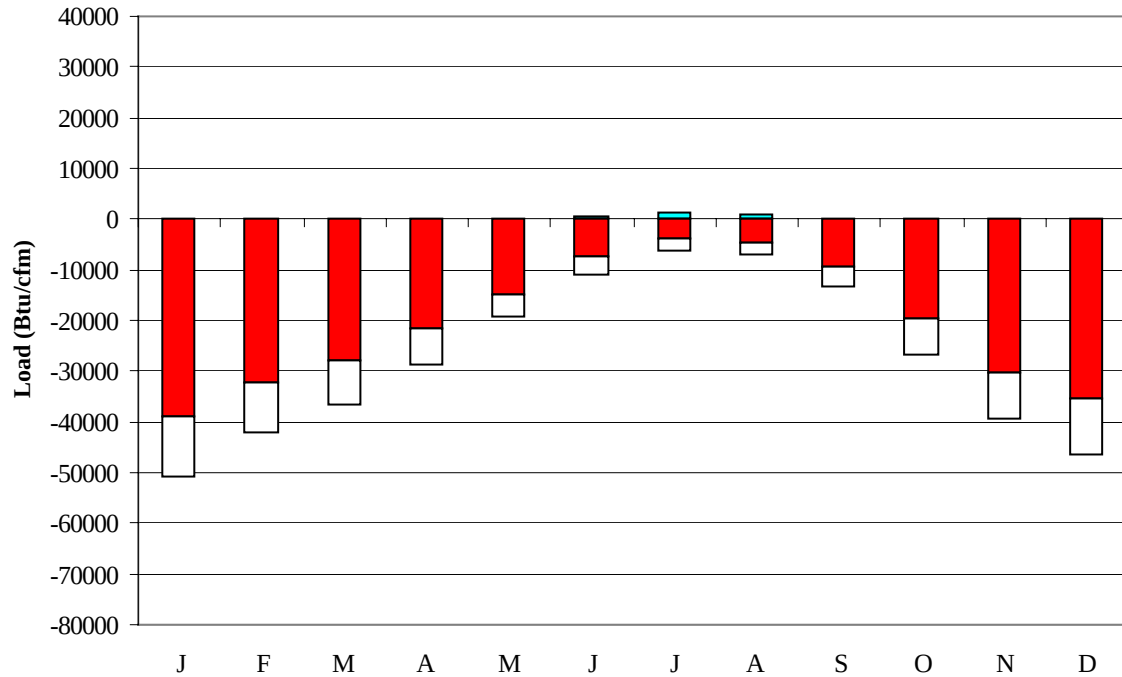
	Mean Cooling Degree Days (°F)	Mean Heating Degree Days (°F)
JAN	0	1407
FEB	0	1152
MAR	0	981
APR	2	738
MAY	14	486
JUN	75	227
JUL	142	101
AUG	119	121
SEP	40	300
OCT	5	671
NOV	0	1072
DEC	0	1273
ANN	397	8529

ROCK SPRINGS

WY

WMO No. 725744

Average Ventilation and Infiltration Loads
(Outside Air vs. 75°F, 60% RH summer; 68°F, 30% RH winter)



	Average Sensible Cooling Load (Btu/cfm)	Average Sensible Heating Load (Btu/cfm)	Average Latent Cooling Load (Btu/cfm)	Average Latent Heating Load (Btu/cfm)
JAN	0	-38878	0	-12011
FEB	0	-32049	0	-10003
MAR	0	-27773	0	-8678
APR	0	-21424	0	-7430
MAY	18	-14778	0	-4556
JUN	570	-7453	0	-3407
JUL	1309	-3779	2	-2266
AUG	963	-4410	0	-2566
SEP	192	-9497	2	-3976
OCT	1	-19709	0	-7123
NOV	0	-30106	0	-9245
DEC	0	-35294	0	-11003
ANN	3053	-245150	4	-82264

Average Annual Solar Radiation – Nearest Available Site

(Source: National Renewable Energy Laboratory, Golden CO, 1995)

City: ROCK SPRINGS
 State: WY
 WBAN No: 24027
 Lat(N): 41.6
 Long(W): 109.07
 Elev(ft): 6746

Stn Type: Secondary
 SHADING GEOMETRY IN DIMENSIONLESS UNITS

Window: 1
 Overhang: 0.58
 Vert Gap: 0.327

AVERAGE INCIDENT SOLAR RADIATION (Btu/sq.ft./day), Percentage Uncertainty = 9		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Global	670	960	1330	1710	2040	2290	2270	2020	1640	1180	740	590	1460
	Std Dev	46	59	80	110	106	109	83	97	112	81	46	35	36
	Minimum	590	810	1120	1510	1770	2080	2060	1770	1360	1010	680	530	1360
	Maximum	750	1080	1500	1910	2240	2520	2410	2190	1860	1300	840	650	1520
	Diffuse	290	380	530	680	750	710	670	590	460	360	310	250	500
Clear Day	Global	880	1250	1770	2310	2670	2820	2720	2410	1940	1390	950	780	1830
NORTH	Global	190	260	350	450	580	690	640	490	360	280	210	170	390
	Diffuse	190	260	350	440	500	530	510	440	360	280	210	170	350
Clear Day	Global	160	220	290	410	600	740	680	470	330	240	180	150	370
EAST	Global	480	660	880	1100	1260	1400	1420	1300	1090	820	530	440	950
	Diffuse	240	330	440	540	620	620	610	550	450	350	260	220	440
Clear Day	Global	710	930	1210	1470	1600	1640	1610	1490	1290	1000	750	640	1200
SOUTH	Global	1230	1340	1300	1120	960	900	950	1140	1390	1490	1250	1190	1190
	Diffuse	370	440	510	570	580	570	560	540	500	430	380	340	480
Clear Day	Global	2050	2100	1940	1530	1160	1000	1050	1340	1750	2020	2030	1980	1660
WEST	Global	480	650	840	1000	1130	1240	1220	1130	1030	800	530	430	870
	Diffuse	250	330	440	550	620	640	620	560	460	350	270	220	440
Clear Day	Global	710	930	1210	1470	1600	1640	1610	1490	1290	1000	750	640	1200

Average Annual Solar Heat and Illumination – Nearest Available Site

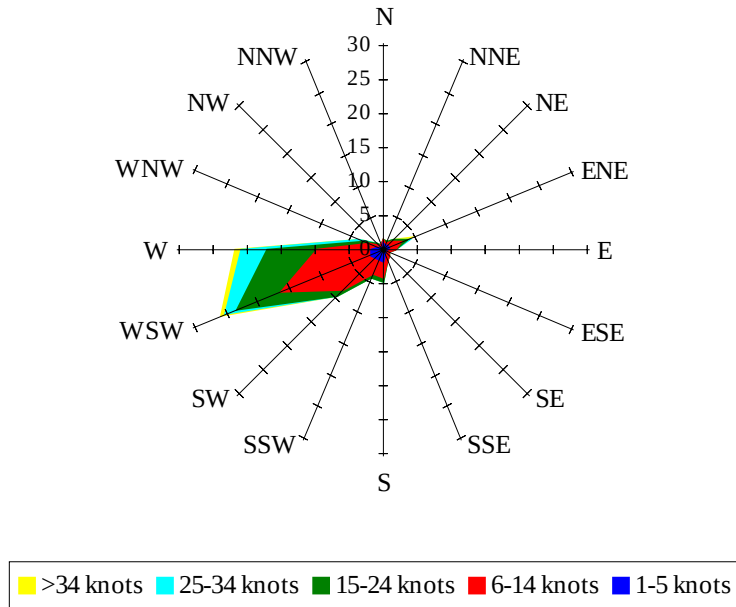
(Source: National Renewable Energy Laboratory, Golden CO, 1995)

AVERAGE TRANSMITTED SOLAR RADIATION (Btu/sq.ft./day) FOR DOUBLE GLAZING, Percentage Uncertainty = 9		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
HORIZ	Unshaded	420	640	930	1230	1480	1670	1660	1470	1170	810	480	360	1030
NORTH	Unshaded	130	180	240	310	380	440	410	320	250	190	140	120	260
	Shaded	120	160	210	270	340	390	370	290	230	170	130	100	230
EAST	Unshaded	330	460	630	790	910	1010	1020	940	780	580	370	300	680
	Shaded	300	410	550	680	770	850	860	800	680	510	330	270	580
SOUTH	Unshaded	930	990	910	740	590	530	570	720	940	1080	940	900	820
	Shaded	910	920	700	460	360	350	350	400	650	940	910	890	650
WEST	Unshaded	330	460	600	710	810	880	870	810	730	560	370	300	620
	Shaded	300	410	520	610	680	740	730	690	630	500	330	270	540

AVERAGE INCIDENT ILLUMINANCE (klux-hr) FOR MOSTLY CLEAR AND MOSTLY CLOUDY CONDITIONS, Percentage Uncertainty = 9		March					June				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	35	68	79	65	31	46	82	100	97	74
	M.Cloudy	24	48	58	47	21	34	64	81	76	57
NORTH	M.Clear	9	13	14	13	8	19	14	16	16	14
	M.Cloudy	9	15	16	14	8	15	16	17	17	16
EAST	M.Clear	77	61	14	13	8	85	76	36	16	14
	M.Cloudy	38	39	16	14	8	51	57	32	17	16
SOUTH	M.Clear	38	73	85	71	33	10	31	48	46	25
	M.Cloudy	21	46	57	44	18	11	27	42	39	22
WEST	M.Clear	9	13	16	63	72	10	14	16	46	80
	M.Cloudy	9	15	18	40	34	11	16	17	39	58
M.Clear	(% hrs)	34	34	28	25	28	59	54	45	34	30
		Sept					Dec				
		9am	11am	1pm	3pm	5pm	9am	11am	1pm	3pm	5pm
HORIZ.	M.Clear	25	64	84	80	52	10	36	44	29	3
	M.Cloudy	17	47	63	59	38	7	26	32	21	3
NORTH	M.Clear	7	12	14	14	11	4	9	10	8	2
	M.Cloudy	7	14	16	16	12	3	9	11	8	1
EAST	M.Clear	71	75	33	14	11	35	42	10	8	2
	M.Cloudy	32	49	28	16	12	14	24	11	8	1
SOUTH	M.Clear	19	57	78	74	46	30	79	91	68	10
	M.Cloudy	12	39	56	52	30	12	40	49	34	4
WEST	M.Clear	7	12	14	49	79	4	9	16	47	14
	M.Cloudy	7	14	16	36	48	3	9	14	25	5
M.Clear	(% hrs)	61	59	55	46	47	35	37	31	32	37

Wind Summary - December, January, and February

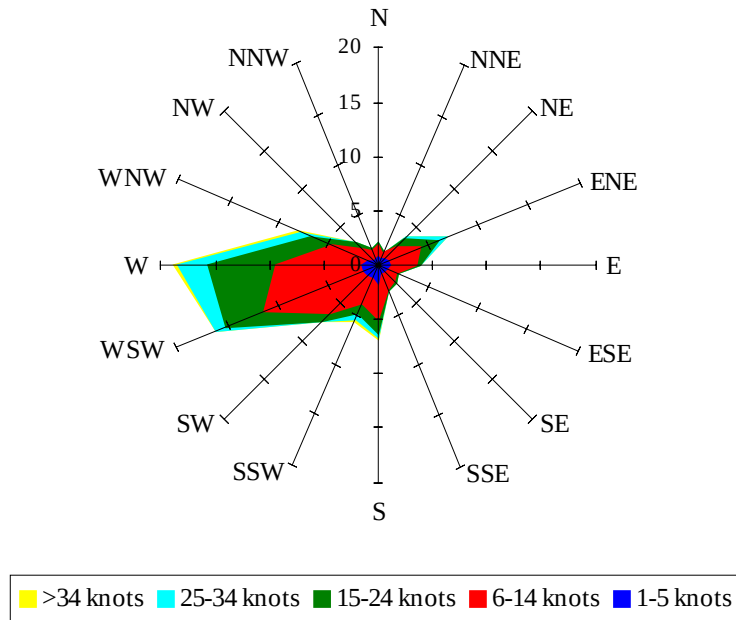
Labels of Percent Frequency on North Axis



Percent Calm = 14.64

Wind Summary - March, April, and May

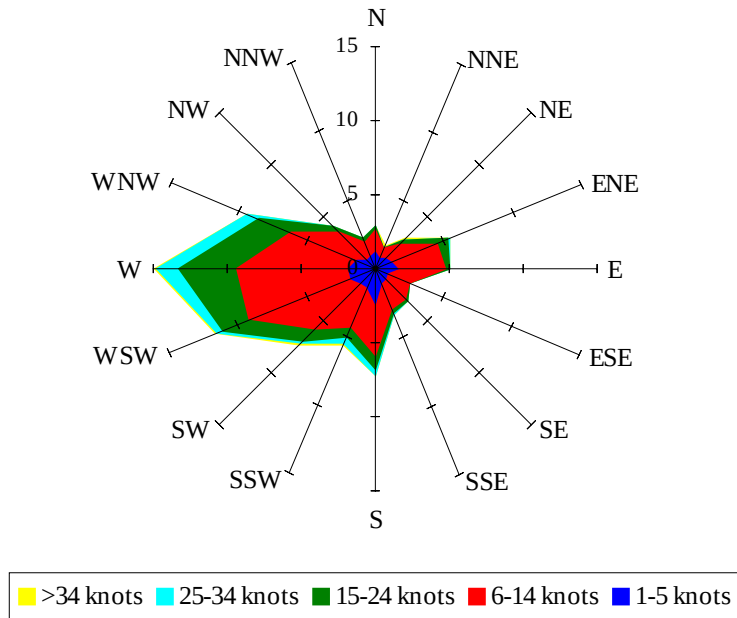
Labels of Percent Frequency on North Axis



Percent Calm = 8.66

Wind Summary - June, July, and August

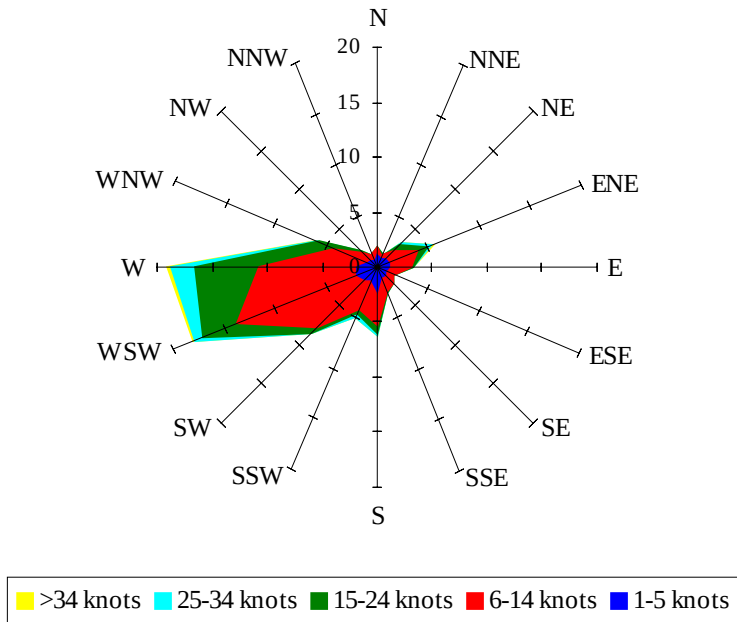
Labels of Percent Frequency on North Axis



Percent Calm = 11.45

Wind Summary - September, October, and November

Labels of Percent Frequency on North Axis



Percent Calm = 12.47